

Dear Market Advisory Committee Members,

This is an approximate transcript of my comments from the public commenting period on June 12, 2007, with some additional commentary added.

I work with the Interdisciplinary Center for Economic Sciences at George Mason University.

<http://www.ices-gmu.org/>

And SIRCA Labs in Australia

<http://see-lab.sirca.org.au/>

The work we do focuses on test bedding of both new and existing market institutions and practical implementations of new markets and property rights such as those being proposed under AB32. Between all of us, we have several decades of test bedding experience, and numerous clients including the State of Virginia, the US EPA, the FCC, JPL, SCAQMD, Midwest Independent System Operators (MISO), Visa Card International, Verizon, State Street Bank, and Sears Logistical Systems among others. Our experience spans environmental markets and incentives, government property auctions, financial markets and instruments, logistics, demographics, electricity markets, and more.

Based on our reading of the draft proposal, we had three primary questions and a statement:

Q1. As a clarification on the proposed 3-year compliance period, how do you envision this being implemented?

A1. (This is my understanding of the MACs answer from June 12) The emissions are measured for a one year period, then the emitting entity has up to two additional years to make good on any shortage of credits. That is, emissions for the year of 2012 have until the end of 2014 to be fully reconcilled. This effectively allows 'borrowing' of credits from the next two years of allowances.

Comments: Given my understanding of the answer, it is not clear to me that allowing a two year grace period after an emission reconcillation period would have a positive impact on price stability. It's easy to envision a scenario where several companies come up short of emission allowances one year, leading to significant price spikes at various times over the next two years as they try to make good on their shortage, while simultaneously competing with other entities trying to make good on current year emissions.

Recall that the plan is to have a scarcity of credits, rather than some degree of over-allocation as was done initially with the EU ETS, RECLAIM, and other existing environmental Cap & Trade systems. This requires that companies be accurate and correct from Day One rather than 'easing' into the routine. Thus, a miscalculation (or mishaps such as refinery fires) by a few companies early on in the program could easily be magnified and exacerbated in the near term as that shortage carries forward into the decreasing cap, and technological advances are not yet available for CO2 reduction and/or there are insufficient "real and verifiable" offsets.

Perhaps better here would be the allowance of near-term 'borrowing' from the next two years of allowances, but that they must be reconcilled at the end of the current emissions year. Also, frequent reporting and 'trueing' up will better prevent price fluctuations than annual reporting and reconcilliation. For example, quarterly reporting and reconcilliation was one of the better features in RECLAIM that provided a great deal of price stability, along with a known level of over-allocation. In the EU ETS, the assumption that there was an initial scarcity of credits, which instead turned out to be a significant surplus contributed greatly to the price collapse in May 2006.

Q2. How does the (3-yr) compliance period interact with unlimited banking, specifically with regard to price volatility and "no borrowing"?

A2. Haven't had a chance to consider this at this time.

Comments: This is a relatively complex topic, so it is not surprising that it hasn't been considered yet. However, this is an excellent example of one of the areas that can be proven out through test bedding.

Q3. How far in advance will credits be auctioned/made available? For example, 7 years in advance with the acid rain program, 20 years for RECLAIM, and 5 year blocks for EU ETS (these being issued approximately 1.5 years before the expiration of the current 5 year block). This time horizon has a significant impact on price certainty and thus on businesses' long-term planning.

A3. Haven't selected a time horizon yet. Judy Greenwald asked for any recommendations we might have on the subject.

Comments: Again, this is an excellent example of an area that can be examined under test bedding. This is significantly impacted by the ratio of auctioned vs. granted allowances, terms of payment for credits (that is, must a stream be paid for all at once, or can a stream be paid for over time), how far in advance of valid dates new streams are auctioned, and so on.

Statement:

As with all new endeavors, the devil is in the details. I'm glad to see that "test bedding" is in the works as there are a number of new ideas and differences from other similar programs in this proposal. And the interactions between these points and their resulting market implications are untried.

Among other things, there is a great deal of money and prestige riding on the success of this program. "Test bedding" it before rolling it out is a wonderful idea.

As luck would have it, Vernon Smith, the father of economic test bedding (and who was awarded the Nobel Prize in Economics for his work

in this area), is intrigued by the California GHG market institution. Dr. Smith and his group of economists would be more than happy to work with the State of California on this critical topic.

We'd be happy to work with RGGI, too.

Thank you for your time and consideration, Lance Clifner